42 Draft Designs

Boost Gauge Troubleshooting

Leaks

If you can hear a leak inside the car it's most likely the push-in fitting. Don't panic! Your push-in fitting is **not** defective. These fittings were designed for industrial applications and can handle absolute vacuum and 200psi. If your push-in fitting is leaking, you simply need to insert the tubing all the way. Reference our *Boost Gauge Tubing Kit Installation Instructions* and push the tubing in all the way! It should take some force.

If you feel like you have a leak under the hood, start checking over your OEM vacuum lines. Our fittings fit too tight to leak, so any additional leaks would be from rotten OEM lines. It may be worth your while to replace any braided OEM line that feels dry rotted.

Boost / Vacuum Readings – 1.8T

If you feel like your gauge isn't reading correctly, first drive the car. You must put load on the engine for a boost gauge to show any real reading. Simply revving the engine will show vacuum readings only. Drive the car in 3rd or 4th gear and engage the throttle completely at a low rpm. This will put sufficient load on the motor to make full boost. Don't be alarmed when the gauge spikes and boost drops steadily. This is caused by the undersized OEM turbo running out of breath.

The 1.8T engine will be in vacuum when not boosting. When the engine is warmed up, the engine should pull 16" – 20" of vacuum at idle. When driving around town, the engine should be in vacuum anytime the throttle body is closed or only open slightly. The car will only make boost when there is sufficient load on the motor.

Early 150hp 1.8T motors should boost 8-10psi stock. Later 180hp and 225hp 1.8T motors should boost 12-14psi stock. If you purchase a performance chip please contact the manufacturer for expected boost readings. Typical 'chipped' 180hp 1.8t engines spike 22+psi and hold 15-16psi in the upper RPMs.

Boost / Vacuum Readings – TDI

If you feel like your gauge isn't reading correctly, first drive the car. You must put load on the engine for a boost gauge to show any real reading. Simply revving the engine will show only slight boost. Drive the car in 3rd or 4th gear and engage the throttle completely at a low rpm. This will put sufficient load on the motor to make full boost. Don't be alarmed when the gauge spikes and boost drops slightly. TDI turbos are infamous for spiking high when needed.

TDI motors have no throttle body, therefore they pull very little vacuum. A 0-15 or 0-30 boost gauge should be used. If you are using a 30"-25psi boost gauge on your TDI, you will notice that the motor pulls less than 5" of vacuum. This is normal.

Buzzing – 1.8T

The T-fitting included with our boost tubing kit has a built in restrictor to prevent vibrations in the boosted air stream from reaching the gauge. Vibrations produced by the turbocharger will vibrate the internals of the gauge and produce a 'buzz' sound. In order for the T-fitting to work properly, the center barb of the fitting must connect to the boost gauge tubing. To test the fitting, notice the center barb is not a through-hole. Located inside the bottom of the barb is a tiny hole. Blowing through this barb will produce only a small amount of air.

Buzzing – TDI

The inline fitting included with our boost tubing kit has a built in restrictor to prevent vibrations in the boosted air stream from reaching the gauge. Vibrations produced by the turbocharger will vibrate the internals of the gauge and produce a 'buzz' sound. This fitting may be installed anywhere in the boost tubing. We recommend installing it underneath the dashboard. Simply cut the tubing and install. No hose clamps are necessary.

If your gauge is still making a buzzing noise, an additional inline restrictor can be added. You can also experiment with adding an additional buffer at the gauge. Remove the push-in fitting and place a small amount of cotton inside the brass threaded barb on the back of the gauge. Use cotton from a cotton ball or Q-tip. Beware – cotton can be very restrictive. Start small and be sure that the additional restriction has not affected boost and vacuum readings.